

REMARKS

In response to the final Office Action dated May 10, 2007, claims 1, 14, 22, and 26 have been amended. Therefore, claims 1-7, 9, 11-15, and 18-32 remain in the case. The Applicants respectfully request that this amendment be entered under 37 C.F.R. 1.116 to place the above-referenced application in condition for allowance or, alternatively, in better condition for appeal. In light of the amendments and arguments set forth herein, reexamination and reconsideration of the application are requested.

Section 103(a) Rejections

The final Office Action rejected claims 1-7, 9, 11-15, and 18-32 under 35 U.S.C. § 103(a) as being unpatentable over Bayer et al. (U.S. Patent No. 6,311,190) in view of Oracle 8i. Oracle 8i is described in two papers: "Programming Environments for Oracle Objects", pp. 1-18 (hereinafter referred to as Reference A, and "Programmatic Environments", pp. 1-27 (hereinafter referred to as Reference B) and further in view of Blumberg (U.S. Patent No. 6,240,415)

The Office Action stated that Bayer et al. disclose all elements of the Applicants' claimed invention except that Bayer et al. do "not teach high density voting over a computer network using an object residing on a server that maintains persistent connections between the object and a database; caching the votes received in a memory cache using the object; using the cached votes in calculating a result." However, the Office Action stated that "the concept of using objects in a memory cache to provide a buffer to enable high performance access to a database is a well-known concept, as evidenced by Oracle 8i." Therefore, the Office Action asserted that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Bayer and Oracle 8i to arrive at the Applicants' claimed invention.

In response, the Applicants respectfully traverse these rejections based on the amendments to claims 1, 14, 22, and 26, and the following legal and technical analysis. It is the Applicants' position that the combination of Bayer et al., the Oracle 8i papers (References A & B), and Blumberg is lacking at least one material element of the

Applicants' claimed invention. In particular, the combination does not disclose, either explicitly or implicitly, the material claimed feature of caching and tabulating the votes in the Live Event Object prior to writing in the database.

Further, the combination of Bayer et al., the Oracle 8i papers, and Blumberg fails to appreciate the advantages of this claimed feature. Thus, the Applicants submit that the combination of Bayer et al., the Oracle 8i papers, and Blumberg cannot make obvious this claimed feature of the Applicants' invention.

To make a prima facie showing of obviousness, all of the claimed features of an Applicant's invention must be considered, especially when they are missing from the prior art. If a claimed feature is not disclosed in the prior art and has advantages not appreciated by the prior art, then no prima facie showing of obviousness has been made. The Federal Circuit Court has held that it was an error not to distinguish claims over a combination of prior art references where a material limitation in the claimed system and its purpose was not taught therein. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Moreover, as stated in the MPEP, if a prior art reference does not disclose, suggest or provide any motivation for at least one claimed feature of an Applicants' invention, then a prima facie case of obviousness has not been established (MPEP § 2142).

Amended Independent Claims 1, 14, 22 and 26

Amended independent claim 1 of the Applicants' claimed invention includes a method for facilitating interactive voting over the Internet during a corresponding live television broadcast event. The method includes presenting a survey question and a plurality of responses to voters viewing the live television broadcast event, directing the voters to cast votes over the Internet at a web site of a sponsor of the live television broadcast event, receiving votes at a web site server in response to the survey question, and providing a Live Event Object residing on the server that maintains persistent connections between the Live Event Object and a database. The method further includes caching the votes received in a memory cache for a predefined time interval using the Live

Event Object, and tabulating in memory on the server the cached votes accumulated over the predefined time interval to generate intermediate voting results. The votes are cached and tabulated in the Live Event Object prior to writing in the database. The method also includes writing the intermediate voting results and each raw vote accumulated over the predefined time interval to the database at the predefined interval, computing in real time a final voting result to the survey question by continuously tallying each of the intermediate voting results written in the database, and presenting the final voting results to viewers on the live television broadcast event prior to its conclusion.

Independent claim 14 of the Applicants' claimed invention includes an interactive voting system using a computer network. The system includes a server in communication with the computer network for receiving votes from a plurality of voters in response to a polling question presented to the voters during a live broadcast event that directs the plurality of voters to respond to the polling question by visiting a web site. The system further includes an object residing in memory on the server for caching the votes received during a predefined time interval and summing the votes accumulated during that predefined time interval to compute an intermediate voting result, wherein the object is a non-relational object. The system also includes a database having a connection with the object that receives and writes the intermediate voting result and each raw vote received during the predefined time interval to the database at the predefined time interval, such that a plurality of intermediate voting results for different time intervals are generated, tabulating a final voting result in real time by summing each of the plurality of intermediate voting results, and presenting the final voting result during the live broadcast event. The votes are cached and summed in the object prior to writing in the database.

Independent claim 22 of the Applicants' claimed invention includes an interactive voting system that uses a computer network to process voting data in response to a survey question asked during a live television broadcast. The system includes a Live Event Vote Server in communication with the computer network and accessible at a web site of a sponsor of the live television broadcast, and a Live Event Object residing in memory on a Live Event Vote Server. The Live Event Object receives and caches voting

data over a predefined time interval from a client in communication with the computer network. The voting data represents responses to the survey questions given by viewers of the live television broadcast after having visited the sponsor's web site. The Live Event Object tabulates the cached voting data accumulated over the predefined time interval to generate an intermediate voting result, and writes the intermediate voting results and each raw vote accumulated over the predefined time interval to a Live Event Database through persistent connections between the Live Event Object and the Live Event Database such that the intermediate voting result is used to compute a final voting result in real-time and the final voting result is presented to television viewers during the live television broadcast. The voting data is cached and tabulated in the Live Event Object prior to writing to the Live Event Database.

Amended independent claim 26 of the Applicants' claimed invention includes in a computer network having a plurality of clients and a server, a computer-implemented method for providing interactive voting over the Internet during a live television broadcast. The method includes presenting a survey question and a number of responses to voters viewing the live television broadcast, directing voters viewing the live television broadcast to vote for one or more of the responses by using the plurality of clients to visit a web site of a sponsor of the live television broadcast, transmitting votes submitted by the voters using the plurality of clients over the Internet to the server located at the sponsor's web site, and providing an object resident in memory on the server that contains procedures and instructions for manipulating the votes. The method further includes accumulating votes in the server memory in a cache during a predefined time interval, and tabulating in the server memory the accumulated cached votes at the end of the predefined time interval to generate an intermediate voting result. The votes are cached and tabulated prior to writing in the database. The method further includes writing the intermediate voting result and each raw vote accumulated over the predefined time interval to a database at the end of the predefined time interval. The method further includes establishing and maintaining a persistent connection between the object and the database to facilitate writing of the intermediate voting results, repeating the accumulation of votes and the writing of intermediate results to the database to obtain a plurality of intermediate results, tabulating

the plurality of intermediate results to obtain a final voting result in real time, and presenting the final voting results within time constraints of the live television broadcast.

The high-density interactive voting system and method “caches votes received from voters and performs batch processing prior to sending the batch results to the Live Event Database” (specification, page 11, lines 16-18; emphasis added). The batch results then are “written to the Live Event Database “ (specification, page 12, lines 24-26). In other words, the votes are cached and tabulated in the Live Event Object cache prior to being written in the database.

In contrast, the combination of Bayer et al., the Oracle 8i papers, and Blumberg merely discloses loading data into a cache and processing the data after the data has been written to a database. More specifically, the combination discloses taking a data object that first has been written in a database, loading the data object into a cache, processing the data object, and writing the changes made to the object to the database.

The Oracle 8i papers disclose an Oracle Call Interface (OCI) that “applications can use to manipulate data and schemas in an Oracle database” (Reference A, page 1, first two sentences under the heading “Oracle Call Interface (OCI)). The data has already been written to the database. The OCI supports a “client side object cache for caching object in memory”, and supports “flushing changes made to objects in the client cache to the database” (Reference A, page 2, second paragraph under the heading “Navigational Access”, bullets 1 and 7; emphasis added). Moreover, “database object are loaded into the cache” (Reference A, page 2, second paragraph under the heading “Object Cache”, line 1). In other words, the data first is written to the database. Once written to the database, the data can be loaded into a cache and processed, and the changes are written to the database. This is opposite of Applicants’ material claimed feature of caching and tabulating the votes in the Live Event Object prior to writing in the database.

In addition, Bayer et al. and Blumberg add nothing to the cited combination that would render the Applicants' claimed invention obvious. In particular, Bayer et al. merely write the votes of a voter to the database one at a time. In particular, in Bayer et al., the "network server receives the answers to the questions of the survey and adds those answers representing votes to records in the database tallying totals for each response answered . . . " (col. 3, lines 7-9; emphasis added). No tabulation is performed prior to writing in the database. Nowhere in Bayer et al. or Blumberg is the Applicants' claimed feature of caching and tabulating the votes in the Live Event Object prior to writing in the database discussed or suggested.

Consequently, no motivation or suggestion for the claimed feature of the Applicants' invention is provided. Absent this teaching, motivation or suggestion, the combination of Bayer et al., References A and B, and Blumberg cannot render the Applicants' claimed invention obvious (MPEP § 2143.01).

The combination fails to appreciate or recognize the advantages of the Applicants' claimed feature of caching and tabulating the votes in the Live Event Object prior to writing in the database. More specifically, "[V]ote caching as performed by the present invention allows these intermediate voting results to be tabulated continuously to generate final voting results much faster than can be obtained by tabulating each vote individually. Thus, another advantage of the present invention is that, unlike previous interactive voting techniques that tabulate results after all the votes have been received, the present invention computes intermediate voting results at specified intervals to enable rapid and real-time tabulation of final voting results" (specification, page 6, lines 3-9). Moreover, the Applicants' claimed invention does not have to first write the vote to the database, thereby saving time and processing power. Neither Bayer et al., Reference A, Reference B, nor Blumberg discuss or appreciate these advantages of the Applicants' claimed feature.

The Applicants, therefore, submit that obviousness cannot be established since the combination of Bayer et al., Reference A, Reference B, and Blumberg fails to teach,

disclose, suggest or provide any motivation for the Applicants' material claimed feature of caching and tabulating the votes in the Live Event Object prior to writing in the database. In addition to explicitly lacking this feature, the combination of Bayer et al., Reference A, Reference B, and Blumberg also fails to implicitly disclose, suggest, or provide explicit or implicit motivation for this feature. Further, the combination of Bayer et al., Reference A, Reference B, and Blumberg fails to appreciate advantages of this claimed feature.

Therefore, as set forth in *In re Fine* and MPEP § 2142, the combination of Bayer et al., Reference A, Reference B, and Blumberg does not render the Applicants' claimed invention obvious because the references are missing at least one material feature of the Applicants' claimed invention. Consequently, because a prima facie case of obviousness cannot be established due to the lack of "some teaching, suggestion, or incentive supporting the combination", the rejection must be withdrawn. ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984); MPEP 2143.01.

Accordingly, the Applicants respectfully submit that amended independent claims 1, 14, 22 and 26 are patentable under 35 U.S.C. § 103(a) over Bayer et al. in view of Oracle 8i (References A and B) and further in view of Blumberg based on the amendments to claims 1, 14, 22, and 26 and the legal and technical arguments set forth above. Moreover, claims 2-7, 9, and 11-13 depend from amended independent claim 1, claims 15, and 18-21 depend from amended independent claim 14, claims 23-25 depend from amended independent claim 22, and claims 27 and 29 depend from amended independent claim 26 and are also nonobvious over Bayer et al. in view of Oracle 8i and further in view of Blumberg (MPEP § 2143.03). The Applicants, therefore, respectfully request reexamination, reconsideration and withdrawal of the rejection of claims 1-7, 9, 11-15, and 18-32.

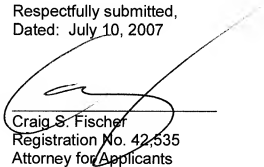
Conclusion

Because the Applicants' claimed invention includes features neither taught, disclosed nor suggested by the art cited in the Office Action, the Applicants respectfully submit that the rejections of claims 1-7, 9, 11-15, and 18-32 has been overcome.

The Applicants, therefore, submit that claims 1-7, 9, 11-15, and 18-32 of the subject application are in condition for immediate allowance. The Examiner, therefore, is respectfully requested to withdraw the outstanding rejections of the claims and to pass all of the claims of this application to issue.

In an effort to expedite and further the prosecution of the subject application, the Applicants kindly invite the Examiner to telephone the Applicants' attorney at (805) 278-8855 if the Examiner has any comments, questions or concerns, wishes to discuss any aspect of the prosecution of this application, or desires any degree of clarification of this response.

Respectfully submitted,
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